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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|---|-------------|---------------------------------|---------------------|------------------|--|
| 10/531,762 | 09/29/2005 | Edgar Ivo Maria Van Der Heijden | 903-132 PCT/US | 4519 | |
| 23869 7590 03/39/2011 HOFFMANN & BARON, LLP 6900 JERICHO TURNPIKE | | | EXAMINER | | |
| | | | SMITH, PRESTON | | |
| SYOSSET, NY 11791 | | | ART UNIT | PAPER NUMBER | |
| | | | 1782 | | |
| | | | | | |
| | | | MAIL DATE | DELIVERY MODE | |
| | | | 03/30/2011 | PAPER | |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

| Application No. | Applicant(s) | | |
|-----------------|-------------------------|---------------|--|
| 10/531,762 | VAN DER HEIJDI MARIA | EN, EDGAR IVO | |
| Examiner | Art Unit | | |
| PRESTON SMITH | 1782 | | |

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| | PRESTON SMITH | 1782 | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING D. Extensions of time may be available under the provisions of 37 CPR 1.13 after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is generated above, the maximum statutory period with a status to reply within the set or extended period for reply with sy status, the contract of the provision of the provision of the provision of the provision of the mailing agent the mailing agent the mailing agent of part of the provision of the provi | TE OF THIS COMMUNICATION (6(a). In no event, however, may a reply be tim- ill apply and will expire SIX (6) MONTHS from- cause the application to become ABANDONEI | N. nely filed the mailing date of this of D (35 U.S.C. § 133). | | | |
| Status | | | | | |
| Responsive to communication(s) filed on <u>07 Fe</u> 2a) This action is FINAL . Sipl This Since this application is in condition for allowan closed in accordance with the practice under <i>E</i> | action is non-final. ce except for formal matters, pro | | e merits is | | |
| Disposition of Claims | | | | | |
| 4) \(\text{ Claim(s)} \) \(\frac{1.32}{2} \) is/are pending in the application. 4a) Of the above claim(s) \(\frac{16.28}{26} \) is/are withdraw 5) \(\text{ Claim(s)} \) \(\text{ is/are allowed.} \) 6) \(\text{ Claim(s)} \) \(\text{ is/are allowed.} \) 7) \(\text{ Claim(s)} \) \(\text{ is/are objected to.} \) 8) \(\text{ Claim(s)} \) \(are subject to restriction and/or are subject to restriction and are | | | | | |
| Application Papers | | | | | |
| 9) The specification is objected to by the Examiner 10) The drawing(s) filed on is/are: a) acc Applicant may not request that any objection to the c Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex | epted or b) objected to by the E drawing(s) be held in abeyance. See on is required if the drawing(s) is obj | e 37 CFR 1.85(a). ected to. See 37 C | | | |
| Priority under 35 U.S.C. § 119 | | | | | |
| 12) Acknowledgment is made of a claim for foreign a) All b) Some *c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the prior application from the International Bureau * See the attached detailed Office action for a list of | have been received. have been received in Application to documents have been received (PCT Rule 17.2(a)). | on No ed in this National | Stage | | |
| Attachment(s) 1) Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) International Discherus (Statement(s) (PTO/SB/08) | 4) ☐ Interview Summary Paper No(s)/Mail Da 5) ☐ Notice of Informal P | ite | | | |

3) Information Disclosure Statement(s) (PTO/SB/08)

Paper No(s)/Mail Date _

| 4) | Interview Summary (PTO-413) |
|----|----------------------------------|
| | Paper No(s)/Mail Date |
| 5) | Notice of Informal Patent Applic |
| 6) | Other: |

Part of Paper No./Mail Date 20110318

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/13/10 has been entered.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 15 provides for the use of a foam dispensing device, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 15 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products*, *Ltd.* v. *Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

The claim has been interpreted as a method claim for examination purposes.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- Resolving the level of ordinary skill in the pertinent art.
- Considering objective evidence present in the application indicating obviousness or nonobviousness.

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Claims 1 and 3-5,10,11-15,31-32 rejected under 35 U.S.C. 103(a) as being unpatentable over Edgard Heijden, US-PGPub 2002/0056730 in view of Peter C Hildebrand, US-Patent 4,279,938 and Edward Schwab, US-Patent 5,342,635.

Regarding claims 1 and 3-5,10,12,31, Heijden teaches an aerosol for dispensing a liquid, in particular, in the form of a foam wherein the dispensing assembly is coupled at least in liquid tight manner (abstract). The dispensing assembly includes a liquid pump with a liquid inlet and outlet, and actuating heat including an outlet passage and dispensing opening for dispensing the liquid (abstract. Also see the figures). The dispensing assembly is comprises a liquid pump chamber and liquid pump piston, an air pump with an air pump chamber and air pump piston (0036). The dispensing assembly is screwed onto the liquid container or reservoir and is thus considered to be "releasable" (0036).

Heijden fails to teach filling a glass with a base liquid which is suitable for human consumption and dispensing a foam suitable for human consumption into the glass.

Hildebrand teaches injecting foam into a beverage inside of a glass in order to create a foam head on the beverage (see abstract and Fig 3. The glass was filled with a liquid suitable for human consumption). Some of the foam that is injected would naturally float to the surface of the beverage since foam has a lower density than liquids. The foam is considered to be for human consumption. The foam is preferably of that or derived from the beverage (column 2, lines 26-27). It would have been obvious

to modify the foam of Heijden in light of Hildebrand to dispense a foam suitable for human consumption since this would increase the possible uses of the device of Heijden and thus increase its profitability. Also, it would have been obvious to dispense the foam into filled glasses as taught by lattes which many find desirable. Also, in Hildebrand, it is unclear if the foam is of a different nature than the base liquid however this concept is well known and Schwab teaches that edible foams are well known in the art to contain syrup (column 4, line 53). It would have been obvious to add syrup to the foam of the composite invention in order to make it tastier. This addition of ingredients would make the foam different from the base liquid. It would have thus been obvious to use a foam of a different nature than the liquid in the composite invention.

Regarding claim 11, spray nozzles typically have a plurality of dispensing openings for atomization of the spray. Additionally nozzles with multiple openings inside are well known (such as a mesh filter on a faucet tap) and thus it would have been obvious to modify the composite invention to include a nozzle with multiple openings in order to provide for the dispersion of a finer foam product.

Regarding claim 13, the positioning of the device in Fig 3 appears to meet the claim limitation

Regarding claim 15, the device can be used in a manner of claim 15.

Regarding claim 14, 32, the reference teaches the invention of claim 1 however the reference fails to teach the liquid containing portion being of a cardboard container. Cardboard containers (carton) with dispensing means are well known (such as milk cartons or juice boxes with a straw. The liquid is stored in the cardboard box and dispensed through the straw of the juice box) and thus one of ordinary skill would have found it obvious to modify the liquid containing portion and make it cardboard since cardboard containers are relatively cheap and this would provide for a means to process and create cheap dispensing devices.

Claims 2 and 6 rejected under 35 U.S.C. 103(a) as being unpatentable over Edgard Heijden, US-PGPub 2002/0056730 in view of Peter C Hildebrand, US-Patent 4.279.938 Charles Hart, US-Patent 4.819.838, Edward Schwab, US-Patent 5,342,635.

Regarding claims 2 and 6, the references teach the invention of claim 1 however Heijden fails to teach dispensing foam beneath the base level.

As can be seen in Fig 3 of Hildebrand, this concept is well known. The invention of Heijden can be modified in the manner taught by Hart (see Fig 1 and 6) to make the invention of Heijden capable of dispensing the foam beneath the base level in a suitable manner. It would have been obvious to dispense the foam slightly beneath the base level since this would allow for some of the sugars from the composite invention to mix with the liquid thus making it sweeter and tastier. Also, it would have been obvious to

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modify the dispenser of Heijden in light of Hart since this would allow for foam to be dispensed without having to physically place one's hand inside of the liquid to dispense it. This would also allow for foam to be dispensed in general without having to dirty up one's hand with foam contents.

Claims 7-9,30 rejected under 35 U.S.C. 103(a) as being unpatentable over Edgard Heijden, US-PGPub 2002/0056730 in view of Peter C Hildebrand, US-Patent 4,279,938 Charles Hart, US-Patent 4,819,838, Edward Schwab, US-Patent 5,342,635, and Stephen Cornell, US-Patent 5,848,721.

Regarding claims 7-9,30, the references teach the invention of claim 5 however it is unclear if the tube is of a straw design.

Cornell teaches a container containing liquid wherein the container has two drinking straws that can be uses for dispensing liquids (see Fig 2, number 44. The tube or straw has a concertina like constriction, having two rigid parts connected by a flexible part, and being flexible and variable by length). It would have been obvious to combine this feature with the composite invention discussed previously and modify the dispensing line to incorporate the structure of flexible straw of Cornell in order to make the line of the composite invention discussed previously less susceptible to breaking and easier to move around in the solution to dispense the foam. Additionally, one of ordinary skill would have recognized the function of a straw and the function of the dispensing line of the composite invention would be to transport a liquid from one

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location to another and thus it would have been obvious to interchange one for the other to perform the same task or function.

Claims 28 rejected under 35 U.S.C. 103(a) as being unpatentable Edgard
Heijden, US-PGPub 2002/0056730 in view of Peter C Hildebrand, US-Patent
4,279,938 Charles Hart, US-Patent 4,819,838, Edward Schwab, US-Patent
5,342,635, and Micheal J. Simmons, US-patent 4,148,417.

Regarding claim 28, the line does not have a plurality of dispensing lines however Simmons teaches a container with "two lines" (the nozzles are considered to be lines (see Fig 2). It would have been obvious to modify the dispenser of the composite invention discussed previously to include this feature in order to allow for more efficient dispensing of foam (more surface area would be covered).

Claims 29 rejected under 35 U.S.C. 103(a) as being unpatentable over Peter Edgard Heijden, US-PGPub 2002/0056730 in view of Peter C Hildebrand, US-Patent 4,279,938,Edward Schwab, US-Patent 5,342,635, and John Kepplinger, US-PGPub 2002/0192345.

Regarding claim 29, the references teach the invention of claim 4 and in particular, Schwab teaches syrup as discussed previously however it is unclear if this is fruit syrup.

Kepplinger teaches that it is well known to create aerated foods (similar to foams) from fruit concentrates (abstract). It would have been obvious to add fruit concentrates (syrup) to the foam of Hildebrand since this would make it tastier and add nutrition to it (Schwab discloses purees column 3, line 4 which wouldn't incorporate into the foam as easily as a syrup would).

Response to Arguments

Applicant's arguments filed 12/13/2010 have been fully considered but they are not persuasive.

Applicant argues that the liquid inside of the device of Hildebrand would not be different than the liquid inside of the glass (see pages 8-10) however Schwab was used to teach that this feature would have been obvious. The newly added limitations are obvious over the newly added references for reasons mentioned in the office action. Applicant also argues that Hildebrand does not comprise a reservoir with a stock of foam liquid that can be formed into a foam by mixign with air, (see last paragraph of page 9). The injector is in the form of a pump and contains liquid and gas inside of it. The injector would provide both the liquid-foam pump and the air pump since air and liquid inside of they injector would be forced out by the pump feature. Foam is a mixture of a liquid and air. Applicant also makes several arguments against the references individually, see pages 8-11 however the references have to be considered in combination, and not alone.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PRESTON SMITH whose telephone number is (571)270-7084. The examiner can normally be reached on Mon-Th 6:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on (571)272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Drew E Becker/ Primary Examiner, Art Unit 1782

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